## CLAIM AMENDMENTS

Please replace all prior versions and listings of claims with the amended claims as follows:

1. (Currently amended) A compound having formula (I):

$$R_3$$
 $A$ 
 $R_4$ 
 $R_2$ 
 $(I)$ ;

wherein:

ring A is an aryl or heteroaryl ring wherein said aryl or heteroaryl ring is either unsubstituted or substituted with one or more substituents selected from halogen,  $-R^{\circ}$ ,  $-OR^{\circ}$ ,  $-SR^{\circ}$ , 1,2- methylene-dioxy, 1,2- ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted  $-CH_2(Ph)$ , unsubstituted  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted  $-CH_2(Ph)$  or (Ph), -O(Ph),  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted with one or more  $-R^{\circ}$  groups;  $-NO_2$ , -CN,  $-N(R^{\circ})_2$ ,  $-NR^{\circ}C(O)R^{\circ}$ ,  $-NR^{\circ}C(O)N(R^{\circ})_2$ ,  $-NR^{\circ}CO_2R^{\circ}$ ,  $-R^{\circ}CO_2R^{\circ}$ , -R

q is 0-2; and wherein:

each  $R^{\circ}$  is independently selected from hydrogen, a  $C_{1-6}$  aliphatic, wherein said  $C_{1-6}$  aliphatic group is either unsubstituted or substituted with one or more substituents

selected from =0, =S, =NNHR\*, =NN(R\*)<sub>2</sub>, =NNHC(0)R\*, =NNHCO<sub>2</sub>(alkyl), =NNHSO<sub>2</sub>(alkyl), =NR\*NH<sub>2</sub>, NH(C<sub>1-4</sub> aliphatic), N(C<sub>1-4</sub> aliphatic)<sub>2</sub>, halogen, C<sub>1-4</sub> aliphatic, OH, O(C<sub>1-4</sub> aliphatic), NO<sub>2</sub>, CN, CO<sub>2</sub>H, CO<sub>2</sub>(C<sub>1-4</sub> aliphatic), O(halo C<sub>1-4</sub> aliphatic), or halo C<sub>1-4</sub> aliphatic; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, -O(Ph), or  $-CH_2(Ph)$ , or wherein two occurrences of R°, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each  $R^*$  is independently selected from hydrogen or a  $C_{1-6}$  aliphatic group wherein said aliphatic group of  $R^*$  is either unsubstituted or substituted with one or more substituents selected from  $NH_2$ ,  $NH(C_{1-4}$  aliphatic),  $N(C_{1-4}$  aliphatic), halogen,  $C_{1-4}$  aliphatic, OH,  $O(C_{1-4}$  aliphatic),  $NO_2$ , CN,  $CO_2H$ ,  $CO_2(C_{1-4}$  aliphatic),  $O(halo\ C_{1-4}$  aliphatic), or halo $(C_{1-4}$  aliphatic);

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from  $-R^+$ ,  $-N(R^+)_2$ ,  $-C(O)R^+$ ,  $-OR^+$ ,  $-CO_2R^+$ ,  $-C(O)C(O)R^+$ ,  $-C(O)CH_2C(O)R^+$ ,  $-SO_2R^+$ ,  $-SO_2N(R^+)_2$ ,  $-C(=S)N(R^+)_2$ ,  $-C(=NH)-N(R^+)_2$ , or  $-NR^+SO_2R^+$ ; wherein:

 $R^+$  is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted  $C_{1-6}$  aliphatic, unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted  $-CH_2(Ph)$ , unsubstituted  $-CH_2(Ph)$ ; or  $C_{1-6}$  aliphatic, phenyl(Ph), -O(Ph),  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted with one or more groups selected from  $NH_2$ ,  $NH(C_{1-4}$  aliphatic),  $N(C_{1-4}$  aliphatic),  $NO_2$ , CN,  $CO_2H$ ,  $CO_2(C_{1-4}$  aliphatic),  $O(halo\ C_{1-4}$  aliphatic), or halo $(C_{1-4}$  aliphatic) or wherein two occurrences of  $R^+$ , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

 $R_a$  is -COOH; n is [[0-4]] 1;

 $R_1$  is [[H, or]] a hydroxyaliphatic, aminoaliphatic, aliphatic-COOH, aliphatic-CONH<sub>2</sub>, or arylaliphatic wherein said hydroxyaliphatic, aminoaliphatic, aliphatic-COOH, aliphatic-CONH<sub>2</sub>, or arylaliphatic is either unsubstituted or substituted with one or more substituents selected from halogen,  $-R^{\circ}$ ,  $-OR^{\circ}$ ,  $-SR^{\circ}$ , 1,2-methylene-dioxy, 1,2-ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted  $-CH_2(Ph)$ , unsubstituted  $-CH_2(Ph)$  or (Ph),  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted with one or more  $-R^{\circ}$  groups;  $-NO_2$ , -CN,  $-N(R^{\circ})_2$ ,  $-NR^{\circ}C(O)R^{\circ}$ ,  $-NR^{\circ}C(O)R(R^{\circ})_2$ ,  $-RR^{\circ}C(O)R^{\circ}$ ,  $-RR^{\circ}C(O)R(R^{\circ})_2$ ,  $-RR^{\circ}C(O)R(R$ 

q is 0-2; and wherein:

each  $R^{\circ}$  is independently selected from hydrogen, a  $C_{1-6}$  aliphatic, wherein said  $C_{1-6}$  aliphatic group is either unsubstituted or substituted with one or more substituents selected from =0, =S, =NNHR\*, =NN( $R^{*}$ )<sub>2</sub>, =NNHC(0) $R^{*}$ , =NNHCO<sub>2</sub>(alkyl), =NNHSO<sub>2</sub>(alkyl), =NR\*NH<sub>2</sub>, NH( $C_{1-4}$  aliphatic), N( $C_{1-4}$  aliphatic)<sub>2</sub>, halogen,  $C_{1-4}$  aliphatic, OH, O( $C_{1-4}$  aliphatic), NO<sub>2</sub>, CN, CO<sub>2</sub>H, CO<sub>2</sub>( $C_{1-4}$  aliphatic), O(halo  $C_{1-4}$  aliphatic), or halo  $C_{1-4}$  aliphatic; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, -O(Ph), or -CH<sub>2</sub>(Ph), or wherein two occurrences of  $R^{\circ}$ , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each  $R^{*}$  is independently selected from hydrogen or a  $C_{1-6}$  aliphatic group wherein said aliphatic group of  $R^{*}$  is either

unsubstituted or substituted with one or more substituents selected from  $NH_2$ ,  $NH(C_{1-4} \ aliphatic)$ ,  $N(C_{1-4} \ aliphatic)_2$ , halogen,  $C_{1-4} \ aliphatic$ , OH,  $O(C_{1-4} \ aliphatic)$ ,  $NO_2$ , CN,  $CO_2H$ ,  $CO_2(C_{1-4} \ aliphatic)$ ,  $O(halo \ C_{1-4} \ aliphatic)$ , or halo $(C_{1-4} \ aliphatic)$ ;

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from  $-R^+$ ,  $-N(R^+)_2$ ,  $-C(O)R^+$ ,  $-OR^+$ ,  $-CO_2R^+$ ,  $-C(O)C(O)R^+$ ,  $-C(O)CH_2C(O)R^+$ ,  $-SO_2R^+$ ,  $-SO_2N(R^+)_2$ ,  $-C(=S)N(R^+)_2$ ,  $-C(=NH)-N(R^+)_2$ , or  $-NR^+SO_2R^+$ ; wherein:

 $R^+$  is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted  $C_{1-6}$  aliphatic, unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted  $-CH_2(Ph)$ , unsubstituted  $-CH_2(Ph)$ ; or  $C_{1-6}$  aliphatic, phenyl (Ph), -O(Ph),  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted with one or more groups selected from  $NH_2$ ,  $NH(C_{1-4}$  aliphatic),  $N(C_{1-4}$  aliphatic), halogen,  $C_{1-4}$  aliphatic, OH,  $O(C_{1-4}$  aliphatic), OH,  $O(C_{1-4}$  aliphatic), or halo OH0 or wherein two occurrences of OH1, on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

 $R_2$  is an unsubstituted aliphatic, or a cycloaliphaticaliphatic or heteroarylaliphatic, wherein said cycloaliphaticaliphatic or heteroarylaliphatic is either unsubstituted or substituted with one or more substituents selected from halogen,  $-R^{\circ}$ ,  $-OR^{\circ}$ ,  $-SR^{\circ}$ , 1,2-methylene-dioxy, 1,2-ethylenedioxy; unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted  $-CH_2(Ph)$ , unsubstituted  $-CH_2(Ph)$  or (Ph), -O(Ph),  $-CH_2(Ph)$ , or  $-CH_2(Ph)$  substituted with one or more  $-R^{\circ}$  groups;  $-NO_2$ , -CN,  $-N(R^{\circ})_2$ ,  $-NR^{\circ}C(O)R^{\circ}$ ,  $-NR^{\circ}C(O)N(R^{\circ})_2$ ,  $-NR^{\circ}CO_2R^{\circ}$ ,  $-NR^{\circ}NR^{\circ}C(O)R^{\circ}$ ,  $-CO_2R^{\circ}$ ,  $-CO_2R^$ 

 $-NR^{\circ}SO_{2}N(R^{\circ})_{2}$ ,  $-NR^{\circ}SO_{2}R^{\circ}$ ,  $-C(=S)N(R^{\circ})_{2}$ ,  $-C(=NH)-N(R^{\circ})_{2}$ , or  $-(CH_{2})_{G}NHC(O)R^{\circ}$ ; wherein:

q is 0-2; and wherein:

each  $R^{\circ}$  is independently selected from hydrogen, a  $C_{1-6}$  aliphatic, wherein said  $C_{1-6}$  aliphatic group is either unsubstituted or substituted with one or more substituents selected from =0, =S, =NNHR\*, =NN( $R^{*}$ )<sub>2</sub>, =NNHC(0) $R^{*}$ , =NNHCO<sub>2</sub>(alkyl), =NNHSO<sub>2</sub>(alkyl), =NR\*NH<sub>2</sub>, NH( $C_{1-4}$  aliphatic), N( $C_{1-4}$  aliphatic)<sub>2</sub>, halogen,  $C_{1-4}$  aliphatic, OH, O( $C_{1-4}$  aliphatic), NO<sub>2</sub>, CN, CO<sub>2</sub>H, CO<sub>2</sub>( $C_{1-4}$  aliphatic), O(halo  $C_{1-4}$  aliphatic), or halo  $C_{1-4}$  aliphatic; an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, phenyl, -O(Ph), or -CH<sub>2</sub>(Ph), or wherein two occurrences of  $R^{\circ}$ , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein:

each  $R^*$  is independently selected from hydrogen or a  $C_{1-6}$  aliphatic group wherein said aliphatic group of  $R^*$  is either unsubstituted or substituted with one or more substituents selected from  $NH_2$ ,  $NH(C_{1-4}$  aliphatic),  $N(C_{1-4}$  aliphatic), halogen,  $C_{1-4}$  aliphatic, OH,  $O(C_{1-4}$  aliphatic),  $NO_2$ , CN,  $CO_2H$ ,  $CO_2(C_{1-4}$  aliphatic),  $O(halo\ C_{1-4}$  aliphatic), or halo $(C_{1-4}$  aliphatic);

the nitrogen of any non-aromatic heterocyclic ring is either unsubstituted or substituted with one or more groups selected from  $-R^+$ ,  $-N(R^+)_2$ ,  $-C(O)R^+$ ,  $-OR^+$ ,  $-CO_2R^+$ ,  $-C(O)C(O)R^+$ ,  $-C(O)CH_2C(O)R^+$ ,  $-SO_2R^+$ ,  $-SO_2N(R^+)_2$ ,  $-C(=S)N(R^+)_2$ ,  $-C(=NH)-N(R^+)_2$ , or  $-NR^+SO_2R^+$ ; wherein:

 $R^+$  is hydrogen, an unsubstituted 5-6 membered heteroaryl or heterocyclic ring, an unsubstituted  $C_{1-6}$  aliphatic, unsubstituted phenyl (Ph), unsubstituted -O(Ph), unsubstituted -CH<sub>2</sub>(Ph), unsubstituted -CH<sub>2</sub>CH<sub>2</sub>(Ph); or  $C_{1-6}$  aliphatic, phenyl(Ph), -O(Ph), -CH<sub>2</sub>(Ph), or -CH<sub>2</sub>CH<sub>2</sub>(Ph) substituted with one or more groups selected from NH<sub>2</sub>, NH( $C_{1-4}$  aliphatic), N( $C_{1-4}$  aliphatic)<sub>2</sub>, halogen,

 $C_{1-4}$  aliphatic, OH, O( $C_{1-4}$  aliphatic), NO<sub>2</sub>, CN, CO<sub>2</sub>H, CO<sub>2</sub>( $C_{1-4}$  aliphatic), O(halo  $C_{1-4}$  aliphatic), or halo( $C_{1-4}$  aliphatic) or wherein two occurrences of  $R^+$ , on the same substituent or different substituents, taken together, form a 5-8-membered heterocyclyl or heteroaryl ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

 ${\rm R}^3$  and  ${\rm R}^4$  are independently selected from  ${\rm R}^{11}$ ,  ${\rm R}^{12}$ ,  ${\rm R}^{14}$  or  ${\rm R}^{15}$ ;

wherein:

each  $R^{11}$  is independently selected from 1,2-methylenedioxy, 1,2-ethylenedioxy,  $R^6$  or  $(CH_2)_m$ -Y;

wherein m is 0, 1 or 2; and

Y is selected from halogen, CN, NO<sub>2</sub>, CF<sub>3</sub>, OCF<sub>3</sub>, OH, SR<sup>6</sup>, S(O)R<sup>6</sup>, SO<sub>2</sub>R<sup>6</sup>, NH<sub>2</sub>, NHR<sup>6</sup>, N(R<sup>6</sup>)<sub>2</sub>, NR<sup>6</sup>R<sup>8</sup>, COOH, COOR<sup>6</sup> or OR<sup>6</sup>;

each  $R^{12}$  is independently selected from  $(C_1-C_6)$ -straight or branched alkyl, or  $(C_2-C_6)$ -straight or branched alkenyl or alkynyl; and each  $R^{12}$  optionally comprises up to 2 substituents, wherein:

the first of said substituents, if present, is selected from  $\mbox{R}^{11}, \mbox{ } \mbox{R}^{14}$  and  $\mbox{R}^{15},$  and

the second of said substituents, if present, is  $\ensuremath{\mathbb{R}}^{11};$ 

each  $R^{14}$  is independently selected from  $OR^{15}$ ,  $OC(O)R^6$ ,  $OC(O)R^{15}$ ,  $OC(O)OR^6$ ,  $OC(O)OR^{15}$ 

each  $R^{15}$  is a cycloaliphatic, aryl, heterocyclyl, or heteroaromatic; and each  $R^{15}$  optionally comprises up to 3 substituents, each of which, if present, is  $R^{11}$ ;

each  $R^6$  is independently selected from H,  $(C_1-C_6)$ -straight or branched alkyl, or  $(C_2-C_6)$  straight or branched alkenyl; and each  $R^6$  optionally comprises a substituent that is  $R^7$ :

 $R^7$  is a cycloaliphatic, aryl, heterocyclyl, or heteroaromatic; and each  $R^7$  optionally comprises up to 2 substituents independently chosen from H,  $(C_1-C_6)$ -straight or branched alkyl,  $(C_2-C_6)$  straight or branched alkenyl, 1,2-methylenedioxy, 1,2-ethylenedioxy, or  $(CH_2)_p-Z$ ;

wherein p is 0, 1 or 2; and

Z is selected from halogen, CN, NO<sub>2</sub>, CF<sub>3</sub>, OCF<sub>3</sub>, OH,  $S(C_1-C_6)-alkyl,\ SO(C_1-C_6)-alkyl,\ SO_2(C_1-C_6)-alkyl,\ NH_2,\ NH(C_1-C_6)-alkyl,\ N((C_1-C_6)-alkyl)_2,\ N((C_1-C_6)-alkyl)_R^8,\ COOH,\ C(O)O(C_1-C_6)-alkyl)_3,\ and$ 

 $R^8$  is  $-C(0)CH_3$ , -C(0)Ph or  $-SO_2Ph$ ; provided that:

 $R^3$  and  $R^4$  are not simultaneously hydrogen; when  $R^3$  is H, then  $R^4$  is not chloro; and when  $R^4$  is H, then  $R^3$  is not -SCH<sub>3</sub> or -NH-C(O)CH<sub>3</sub>.

2. (Currently amended) The compound according to claim 1, wherein ring A is an optionally substituted [[5 or]] 6 membered

aryl or heteroaryl ring, wherein said heteroaryl ring contains up to 2 ring heteroatoms independently selected from 0, S, or NH.

- 3. (Original) The compound according to claim 2, wherein ring A is phenyl.
- 4. (Currently amended) The compound according to claim 1, wherein  $R_1$  is hydrogen,  $-(CH_2)_q-X$ , wherein q is 1-4, and X is OH, NH<sub>2</sub>, COOH or CONH<sub>2</sub>, (C1-C6)-alkyl, or benzyl.
- 5. (Currently amended) The compound according to claim 4, wherein  $R_1$  is hydrogen, hydroxymethyl, methyl, -CH<sub>2</sub>COOH, -CH<sub>2</sub>CONH<sub>2</sub>, aminobutyl, or isopentyl.
- 6. (Previously presented) The compound according to claim 1, wherein  $R_2$  is selected from butyl, isobutyl, cyclopentyl, cyclohexylmethyl, pyridylmethyl, furanylmethyl, or thienylmethyl.
- 7. (Previously presented) The compound according to claim 6, wherein  $R_2$  is selected from 2-furanylmethyl.
  - 8. (Canceled)
- 9. (Previously presented) A pharmaceutical composition comprising a compound according to any one of claims 1-7 and 17-18 and a pharmaceutically acceptable adjuvant or carrier.

## 10-16. (Canceled)

17. (Previously presented) The compound according to claim 1 wherein  $R_3$  and  $R_4$  are independently selected from hydrogen, halo, acetamido, allyloxy, thiophenyl, sulfoxyalkyl, or sulfoxyphenyl.

18. (Currently amended) A compound according to claim 1 selected from:

TNT 6-3-08